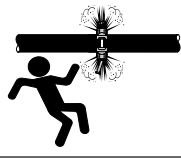






Victaulic® Series 871 Gate Valve



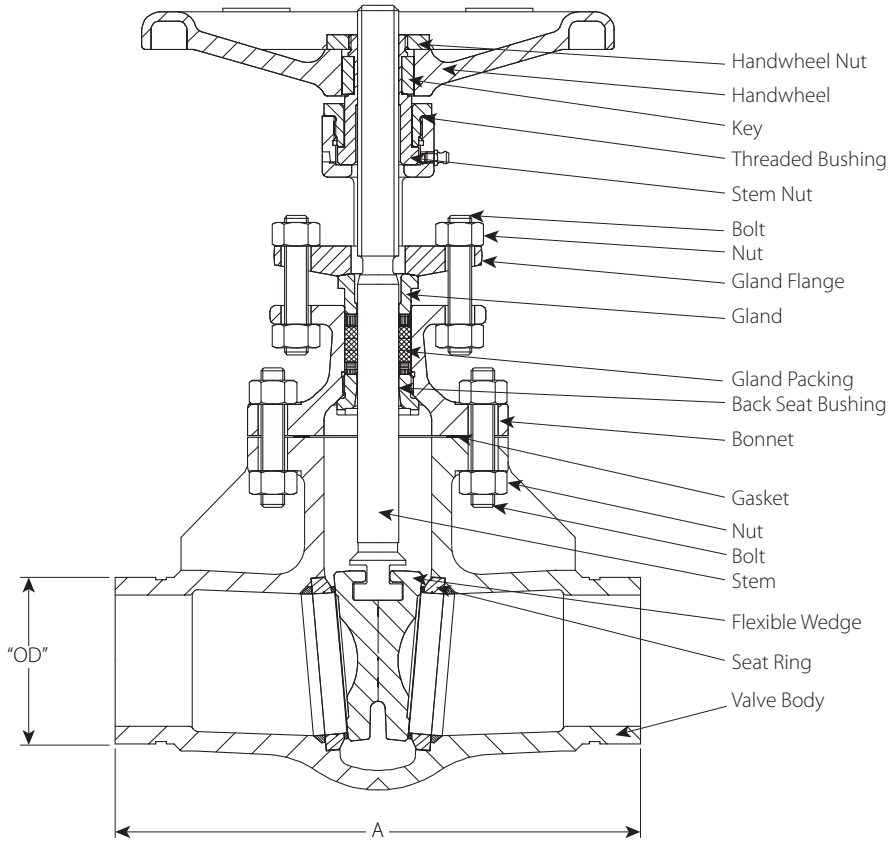
⚠ WARNING

- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.
- The Series 871 Gate Valve is suitable for use in saturated steam service. Use extreme caution when working around steam systems.
- DO NOT impact the valve, pipe, couplings, or fittings when the system is pressurized.
- The valve shall be installed ONLY with Style 870 Rigid Couplings and pipe or fittings that are prepared to Victaulic OGS-200 Specifications. DO NOT install the valve with any other coupling or with pipe/fittings that are prepared to any other groove specification.

Failure to follow these instructions may cause joint failure, resulting in death or serious personal injury and property damage.

SECTION VIEW DRAWING, DIMENSIONS, AND WEIGHTS



Nominal Size inches DN	Actual Outside Diameter "OD" inches mm	"A" inches mm	Approximate Weight Each lbs kg
2 DN50	2.375 60.3	8.54 217	31 14
2½	2.875 73.0	9.50 241	46 21
DN65	3.000 76.1	11.14 283	53 24
3 DN80	3.500 88.9	11.14 283	53 24
4 DN100	4.500 114.3	12.01 305	77 35
DN125	5.500 139.7	15.00 381	121 55
	6.500 165.1	15.87 403	148 67
6 DN150	6.625 168.3	15.87 403	148 67
8 DN200	8.625 219.1	16.50 419	265 120

Victaulic® Series 871 Gate Valve

IMPORTANT INFORMATION

- The Series 871 is a flexible-wedge, metal-seated valve that is designed for bidirectional shutoff service and is suitable for use in saturated steam services. **THIS VALVE IS NOT DESIGNED FOR THROTTLING SERVICES.**
- For complete valve ratings and applications, refer to Victaulic publication 100.12, which can be downloaded at victaulic.com. **DO NOT exceed the performance capabilities listed in Victaulic publication 100.12.**
- Verify that there is adequate clearance around the valve for operating and maintenance activities.
- The valve can be mounted in vertical and horizontal runs. For horizontal pipe, the valve shall be installed with the stem in the vertical "UP" position (handwheel pointing upward).
- Verify that proper pipe supports are in place to prevent strain on the valve. The piping shall be laid out so that no thrust or bending forces act on the valve body during operation.
- Verify that the piping is aligned and supported properly before attempting to install the valve.
- The valve is supplied from the factory with a high-temperature paint that may feel sticky to the initial touch. The paint is designed to harden when exposed to higher temperatures.
- When painting a piping system, DO NOT apply paint to the stem and bolts/nuts.
- Use lockout methods to prevent unauthorized operation of the valve.
- DO NOT stand on or use the handwheel as a support point.
- DO NOT over-torque the handwheel to force the valve into the "CLOSED" position. Refer to the "Torque Limitations" table on this page.

Handling

- The valve shall remain in the "CLOSED" position during handling.
- To prevent damage to the seats and sealing surfaces of the valve body, the plastic shipping caps shall remain in place until the time of installation.
- Refer to the weights listed on the opposite side of this page. Verify that proper lifting equipment is available for handling larger, heavier valve sizes. Lift the valve by placing straps around the body. **DO NOT lift or suspend the valve by the handwheel.**

Storage

- Victaulic strongly recommends indoor storage of the valve. If outdoor storage is required, the valve shall be stored in the original shipping container and then covered completely with a weatherproof tarp.
- The shipping caps shall remain in place to prevent debris from entering the valve body during storage.
- The valve shall remain in the "CLOSED" position during storage.
- The valve shall be stored with the stem in the vertical "UP" position (handwheel pointing upward).

INSTALLATION

⚠ WARNING

- The Series 871 Gate Valve shall be installed **ONLY** with Style 870 Rigid Couplings and pipe or fittings that are prepared to Victaulic OGS-200 Specifications.
- **DO NOT** install the valve with any other coupling or with pipe/ fittings that are prepared to any other groove specification.

Failure to follow these instructions may cause joint failure, resulting in death or serious personal injury and property damage.

1. Prior to installation, check the valve for any damage. DO NOT use the valve if any damage is present.
2. Remove the plastic shipping caps from the valve body. To prevent damage to the sealing surfaces of the valve body, DO NOT use any sharp instruments to remove the shipping caps.
3. Verify that the valve is in the "CLOSED" position.
4. Install the valve by using two Victaulic Style 870 Rigid Couplings and pipe or fittings that are prepared to Victaulic OGS-200 Specifications. Refer to the I-870 installation instructions for complete installation requirements. The I-870 is shipped with the coupling and can be downloaded at victaulic.com.
5. Place the system into service after all installation requirements have been met.

OPERATION

1. Operate the valve by turning the handwheel in the counter-clockwise direction (top view) to the "OPEN" position, then by turning the handwheel in the clockwise direction (top view) to the "CLOSED" position. Repeat this process several times to verify proper operation. **NOTE:** When the valve is in the fully "OPEN" position, turn the handwheel a quarter turn in the clockwise direction to prevent the stem/threads from locking up due to thermal expansion.

Torque Limitations

Nominal Size inches/DN	Actual Outside Diameter inches/mm	Maximum Torque to Reach Fully "OPEN" Position or Fully "CLOSED" Position ft-lbs/N•m
2 DN50	2.375 60.3	24 32
2½, DN65, 3/DN80	2.875, 3.000, 3.500 73.0, 76.1, 88.9	38 52
4 DN100	4.500 114.3	65 88
DN125	5.500 139.7	106 144
6 DN150	6.500 & 6.625 165.1 & 168.3	106 144
8 DN200	8.625 219.1	180 244

INSPECTION

Inspect the valve on a frequency required by the building owner or their representative.

1. Verify that there is no leakage from the gland. If necessary, tighten the nuts at the gland flange evenly by alternating sides.
2. If the handwheel becomes loose, open the valve by turning the handwheel one to two turns in the counterclockwise direction, then tighten the handwheel nut.

For complete contact information, visit victaulic.com